CRITICAL PRACTICE IN AN AGE OF COMPLEXITY - AN INTERDISCIPLINARY CRITIQUE OF THE BUILT ENVIRONMENT

• Paper / Proposal Title:
The complexity of the natural and built environments

• Format:
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• Abstract (300 words):
Today, the natural and the human-built environment are becoming less defined; in part due to the Anthropocene. Philosophy has critiqued this (and other) dichotomies: humans are part of nature and seeing ourselves as separate is part of the problem. This blurring is generally a matter of degree; with wilderness areas as the least disturbed by human interaction and large urban cities at the other end of the scale. The emergence of the information age adds another layer: Artificial Intelligence is becoming so ubiquitous and subtle that what is considered natural is even harder to determine.

Contemporary architecture can relate to nature, but often it is done in a formal, superficial way rather than understanding the underlying ethics and systems of the natural world. Landscape urbanism is becoming more pervasive, but do the designers of buildings really understand the natural environment? How can an understanding and application of complexity theory help us with this issue to become more critical; from the design of individual buildings and objects to the form of cities and infrastructure, to ensure more sustainable and aesthetic futures? Complexity does not mean over complicating. If we are making interventions in a world and climate that is complex
and indeterminate, then we need to understand what this actually means if we hope to critically engage.

This paper will illustrate and explain the most relevant connections between complexity science and design, while suggesting a design methodology for moving forwards. Tying together key theorists from Jane Jacobs view of the city as a complex model to Christopher Alexander’s “Nature of Order” and Mike Batty’s “New Science of Cities”, with contemporary philosophies such as New Materialism and Catherine Malabou’s concept of “Plasticity”.

• Author(s) Biography (200 words each):

Susannah Dickinson is an architect and Associate Professor at the University of Arizona, her research and scholarship connects theories of biomimetics and complexity with digital processes and design pedagogy; with the goal of bringing more life and sustainability into the built environment